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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/693,916

10/28/2003

Sang Ho Lee

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EXAMINER

CHANG, RICHARD

ART UNIT

PAPER NUMBER

2616

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DELIVERY MODE

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

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Office Action Summary	Application No. 10/693,916	Applicant(s) LEE, SANG HO	
	Examiner Richard Chang	Art Unit 2616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 March 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-31 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-31 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-31 are rejected under 35 U.S.C. 102(e) as being clearly anticipated by US patent No. 6,781,971 B1 ("Davis et al.").

Regarding claims 1, 14 and 26, Davis et al. teaches a method for simultaneous multiplexing voice and data service with good voice quality in mobile communication system comprising of

performing SVD call processing (multiplexing voice and data for simultaneous voice and data service with good voice quality) (See Col. 1, lines 11-15) that supports SVD service (multiplexed voice and data service with good voice quality) between mobile terminals (107B) and base stations (102) (See Fig. 1B) by using a SVD service (multiplexed voice and data service with good voice quality) option, and providing SVD service (multiplexed voice and data service) by at least one of transmitting and

receiving voice (306) and packet data (307) using a radio link protocol (RLP) frame after service negotiation (308 controller) using the SVD service (multiplexed voice and data service with good voice quality) option is completed (See Fig. 3, Col. 7, line 56 to Col. 8, line 6).

Regarding claims 2, 15 and 27, Davis et al. further teaches that performing SVD call processing (multiplexing voice and data) and uses a service reference ID (sequence number within service option control message) for a new SVD service (multiplexing voice and data service) option which is different from a pre-designated voice service option or packet data service option (See Table 2, Col. 8, lines 45-65).

Regarding claims 3, 16 and 28, Davis et al. further teaches that implementing in a media access control (MAC) sub-layer (210/310) voice RLP module, which assembles a voice frame (306) into RLP frame and fragments, the voice frame from the RLP frame, in order to transmit and receive the voice and packet data by means of RLP frame (204) (See Fig. 3, Col. 7, line 56 to Col. 7, line 6).

Regarding claims 4-5, 17-18 and 29-30, Davis et al. further teaches that designating a voice RLP frame type using bit combinations not designated in a frame or control type field of a data RLP frame (210/310), in order to transmit and receive the voice and packet data by means of the RLP frame (See Col. 11, line 33 to Col. 12, line 5).

Regarding claims 6, 19 and 31, Davis et al. further teaches that t least one of transforming a packet data frame into a data RLP frame and transforming a voice frame into voice RLP frame (210/310), by using a frame type field or a control field not used in the data RLP frame (See Col. 11, line 33 to Col. 12, line 5).

Regarding claims 7-8 and 19-20, Davis et al. further teaches that voice frame is transformed into the voice RLP frame by using bit combinations not used in the frame type field of the data RLP frame, if the voice frame is a full rate voice frame and 3 bits of frame type information indicating which frame type is the voice RLP frame type (frame format is a design choice for user configuration) (See Col. 13, lines 34-52).

Regarding claims 9-13 and 21-25, Davis et al. further teaches that the voice frame is transformed into the voice RLP frame and if the voice frame is a half rate voice frame or a voice frame under 1/2 rate, and data RLP frame used for transforming the half rate voice frame or voice frame under 1/2 rate into the voice RLP frame is one of control frame, fragmented/assembled data frame, fill frame and idle frame (a standard RLP frame multiplexing service configuration as sub layer function) (See Col. 12, lines 7-48).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Richard Chang whose telephone number is (571) 272-3129. The examiner can normally be reached on Monday - Friday from 8 AM to 5 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wing Chan can be reached on (571) 272-7493. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

rk

rk

Richard Chang
Patent Examiner
Art Unit 2616

Wing Chan
6/25/07

WING CHAN
SUPERVISORY PATENT EXAMINER